

Monitoring Study Group Meeting Minutes

September 22, 2005

CDF Shasta-Trinity Unit Headquarters, Redding

The following people attended the MSG meeting: George Gentry (BOF-Executive Officer and acting chair), Richard Gienger (HWC/SSRC), Kevin Faucher (CTM), Peter Ribar (CTM), Dr. Richard Harris (UCB), Tharon O'Dell (GDRCO), Dr. George Robison (HSU), Duane Shintaku (CDF), Dennis Hall (CDF), Clay Brandow (CDF), Brad Dorken (CDF), Lois Kaufman (CDF), Gabriel Schultz (CDF), Joe Croteau (DFG), Stacy Stanish (DFG), Dr. Cajun James (SPI), Angela Wilson (CVRWQCB), Shane Cunningham (CDF), Chuck Schoendienst (CDF), Brad Valentine (DFG), John Munn (CDF), Anthony Lukacic (CDF), John Knight (CDF), Curt Babcock (DFG), Dr. Michael Wopat (CGS), and Pete Cafferata (CDF). **[Note: action items are shown in bold print].**

We began the meeting with general monitoring related announcements:

- Pete Cafferata announced that Oregon State University is sponsoring a conference and field tour of the Hinkle Creek watershed study in Roseburg, Oregon on October 6-7, 2005. For more information, see: <http://outreach.forestry.oregonstate.edu/hinklecreek/>
- Pete Cafferata stated that the third biennial California Non-Point Source Conference titled "Measuring Water Quality Improvements" will be held in Sacramento on November 7-9, 2005. For more information, see the following website: <http://www.waterboards.ca.gov/nps/fall2005.html>
- Pete Cafferata announced that the Oregon Headwaters Research Cooperative is sponsoring a conference titled "Science and Management of Headwater Streams in the Pacific Northwest" on November 17-18, 2005 in Corvallis, Oregon. For more information, see: <http://westernforestry.org/headwater/headwater.htm>
- Richard Harris stated that Yana Valachovic, UC Cooperative Extension, will teach a 6 week course from October 5th to November 2nd (1 day/wk) on forest stewardship aimed towards new forest landowners. For more information, contact Yana at yvala@ucdavis.edu.
- Richard Harris also updated the group about the University of California watercourse crossing upgrade study. Data collection is still required for a few sites but should be finished by the end of October. The remainder of the funding will be used to make post-treatment measurements in the field.
- Richard Gienger announced that the Buckeye Conservancy and FLOC will sponsor a 2 day workshop on November 3-4, 2005 in the Mattole Valley to discuss larger NTMPs, longer THPs, a Mattole pilot project PTEIR/Mattole IWAT project (collectively know as the Mattole Forest Futures Project). For more information, check the Buckeye Conservancy website at: <http://www.buckeyeconservancy.org/buckeye-project.html>
- Richard Gienger also stated that there will be a conference on dynamic forest ownerships on either October 27 or 28, 2005, sponsored by the Institute of Sustainable Forestry. For more information, contact John Rodgers at (707) 923-7004 or jrogers@newforestry.org. Jim Rinehart, R&A Investment Forestry, will be a featured speaker at the conference.
- George Robison announced that HSU graduate student Peter Manka has recently finished his masters thesis titled "*Suspended Sediment Yields in Tributaries of Elk River, Humboldt County, California.*" This thesis will be posted on the Humboldt State University Department of Forestry and Watershed Management website in approximately 3 weeks (see: <http://www.humboldt.edu/~for/faculty/robison.html>).

Review of the MSG Strategic Plan and Discussion of Future MSG Direction

George Gentry introduced this agenda item by stating that at the last MSG meeting, we began discussing the need for formally revising the January 2000 MSG Strategic Plan. At that meeting, he expressed the need for elevating the MSG's profile and making the MSG more integrated in the issues the BOF is currently discussing. The main issue, Mr. Gentry stated, is that in evaluating regulation packages, it is currently very difficult for BOF staff to compile sufficient amounts of scientific information in the time periods available. As one possible approach to solving this problem, it was suggested that the MSG could become a structured committee which would provide advice to the BOF on technical aspects of proposed rule changes. Mr. Gentry reiterated that there are pros and cons to such an approach. Advantages include providing highly useful information to the Board in a timely manner and disadvantages include politicizing the group, and the loss of the collegial atmosphere MSG has enjoyed for many years. Mr. Gentry added, however, that there are other avenues that the MSG could take in the future in addition to this structured technical advisory approach, including helping landowners with appropriate techniques for monitoring. At the July 2005 MSG meeting, we stated that further discussion would occur at this meeting regarding future MSG direction, including the possibility of the MSG both retaining an information sharing function and forming a much more structured work group to perform specific tasks in a timely manner for the BOF.

Over the next one and a half hours, a considerable amount of discussion took place regarding this topic. Cajun James began the dialogue by describing how the political process and legal requirements in California dictate what we do for monitoring, and comparing this system to that which takes place in Oregon. Cajun and George Robison summarized how Oregon State University has a legal mandate to use designated money from their timber tax to conduct research and monitoring on the impacts of forestry operations, with results to be used to guide forestry regulations. Additionally, ODF itself has substantial staff and funding to conduct a considerable amount of applied monitoring and research. They stated that combined, the research and monitoring conducted by OSU and ODF has had a huge influence on Oregon forest policy, leading to a more science-based approach to forestry regulations than we have in California. One historic example illustrating how OSU has been involved in the forest regulatory process in Oregon is the Alsea Watershed Study, located in the Oregon Coast Range. This long-term research project was initiated by OSU in the 1960's and documented the impacts of differing types of silviculture on water temperature and sediment yields. It strongly influenced how Oregon's 1972 Forest Practices Act was written (e.g., influencing clearcut size limitations). Richard Harris added that while there have been some examples of cooperative research conducted in California, such as the CRYPTOS and CACTOS timber output simulation models and the Institute for Forest and Watershed Management (IFWM) at Humboldt State University (formerly known as the Forest Science Project), in general there has been a disconnect between science and the political process here.

Richard Gienger stated that the MSG itself should not become a technical advisory committee, but that it may be possible to form an advisory committee collectively from the faculties at the California forestry universities (UC Berkeley, HSU, and Cal Poly San Luis Obispo). He supported the role of MSG in assisting forest landowners in developing effective monitoring programs related to water quality issues.

Mr. Gentry informed the group that the BOF does have a responsibility for conducting research, but that it has not been actively involved in this for several years. A BOF committee specifically formed to address research was cut by the Governor's office more than a decade ago (at the same time that the DTACs were eliminated). Richard Harris stated while short term "blue ribbon" committees have been appointed in the past (e.g., SRP in 1998-1999), a longer-term technical advisory committee (TAC) would be highly beneficial in California. He added that the MSG could advocate the creation of this type of committee.

Cajun James stressed that the California forestry schools currently do not have many faculty members that are interested in conducting applied forestry research in California, since the field is highly controversial and the rewards are minimal. As an example, Dr. Lee MacDonald, Colorado State University, has conducted more recent applied research in California than most of the in-state researchers.

Duane Shintaku stated that Section 4553 of the California Forest Practices Act requires the BOF to consult with educational institutions during the formulation or revision of Forest Practice Rules—and that the Board needs to refocus on this in the near future. He added that it is unclear, however, how to find appropriate levels of funding for this to occur, and what the best approach would be to have the BOF refocus on the requirements of Section 4553. Mr. Gentry said that this is the first step—receiving input from the MSG. He added that the Board must be proactive, since every two years the BOF must produce a report on research needs for the legislature, including funding needs. He has brought this issue to the MSG because it is one group the Board currently has with academic and research ties (CDF's FRAP unit is another alternative).

Richard Harris informed the group that if a dean of a college at a university appoints a person to a formal state committee, it has some standing under the heading of "university service category" (i.e., official recognition mechanism beyond peer reviewed paper publication record). George Robison agreed with Richard that it would be highly beneficial to have a mechanism in place where gasoline and other expenses could be paid for out of a structured committee's funding. George added that without the recognition of appointment to a formal state committee, voluntary contributions to a group such as the MSG are not rewarded or funded by the university. Michael Wopat supported the general contention that formality is currently needed to bring credibility to the process, and that relying on people's general interest to volunteer in the process has led to the view that the MSG is under-utilized by the BOF. Richard Harris suggested that at least two year appointments would be needed for a formal technical committee for continuity and a longer-term perspective on issues. Peter Ribar stated that while he was not totally enthralled with the concept of a formal technical committee, he felt the industry would generally be supportive. Clay Brandow stressed that the proposed technical committee must be well tied into the State and Regional Water Board's Tracking and Monitoring Council if it is going to affect water quality decisions.

There was some discussion of whether the proposed technical advisory committee (TAC) should be a subcommittee of the MSG, or a parallel committee (i.e. MSG being the policy committee and the TAC being the technical committee). The general consensus was that the TAC should be a parallel committee, not a subcommittee for political reasons.

Peter Ribar stated that it is important for the technical committee to be progressive, and not reactive as we have been in the past. He stated that the MSG has been set up to advise and

assist CDF implement their monitoring efforts in the past—so CDF issues have driven the majority of the MSG's efforts over the past decade. He asked if this is a good approach, or whether a “think tank” approach outside of CDF would be better to anticipate monitoring needs, rather than reacting to them (i.e., external body directed). It was expressed that it is critical that all the agencies and university staff believe in the process and have a stake in the results, and that it is important to frame the appropriate questions prior to embarking on a detailed monitoring program.

There was continued discussion on science vs. politics in California and Oregon, with varying opinions offered by Cajun James, Duane Shintaku, Richard Harris, and George Gentry. Mr. O'Dell pointed out several differences between Oregon and California, including living with CEQA in CA, the initiative process here, lack of timber being an economic driver in CA, and lack of timber yield tax funded research in CA. Mr. Gentry stated that the discussion had come full circle, and that we were back to the question of the best approach(es) for the BOF to compile an array of good science for a diverse set of issues. George referred the group to the handout Pete Cafferata produced listing a draft set of potentially revised MSG strategic plan goals, including the first one that states: The Monitoring Study Group will:

- 1) Provide timely and sound advice to the BOF on technical aspects of proposed rule changes, particularly related to water quality, soil erosion, and watershed conditions. Review is to occur with a “structured” MSG Technical Advisory Committee with appointed members.

There was general consensus from the group present that this was an appropriate revised MSG strategic plan goal, and that it was critical for the MSG/CDF/BOF to develop a mechanism for funding active involvement by university personnel in MSG activities. Mr. Gentry stated that he and Mr. Cafferata would write a brief summary of discussion and send it to the MSG for review. There will be additional discussion on this topic at the next MSG meeting in November. The MSG is to continue reviewing and developing comments on the draft set of revised MSG strategic plan goals handed out at this meeting prior to the next meeting.

Peer Review Process for Instream Monitoring Protocols

Following lunch, Cajun James updated the MSG on progress made in developing a peer review support/technical group for instream monitoring in California. She stated that there are currently 20 to 30 highly qualified people willing to offer assistance. Cajun said that we need a funding mechanism to pay for food, lodging, etc. so that those willing to travel to remote field sites can do so without incurring a financial burden. Additionally, we need one or two people willing to organize the peer review group and provide a detailed list of who is available and their area(s) of expertise. Dr. James Kirchner, UC Berkeley, may be one of the organizers. Similar questions to those discussed in the morning portion of the meeting remain for getting this instream peer review technical group fully functioning.

Cajun James had suggested at the July MSG meeting that peer-reviewed monitoring protocols be made available and George Gentry offered to post them on the BOF MSG website. Pete Cafferata generated a draft set of possible websites that was provided in a handout. **Several additions were suggested and the list of websites can be viewed at: http://www.bof.fire.ca.gov/board/msg_links.asp. Suggestions for additions should be sent to Pete Cafferata at: pete.cafferata@fire.ca.gov.** George Robison stated that each

of the website protocols were designed for very different purposes, and that this should be stated above the various links. Additionally, it may be beneficial to annotate them in the future. The group also discussed the benefits of funding a graduate student to catalog existing information regarding key instream monitoring approaches and protocols. George Robison stated that he has students at HSU that could do this type of project with a contract through the Humboldt State University Foundation.

Cajun informed the group that the one-day Turbidity Field Measurement Workshop has been postponed from the original date of October 18th. The rescheduled date for the workshop is November 1st at Jackson Demonstration State Forest Headquarters in Fort Bragg. This will be a field workshop to become more familiar with instream monitoring methods related to turbidity. For more information, contact Sherry Cooper, UC Cooperative Extension, at: slcooper@nature.berkeley.edu.

Interagency Mitigation Monitoring Program (IMMP) Presentation

For the next agenda item, Pete Cafferata provided the group with a PowerPoint presentation on the new Interagency Mitigation Monitoring Program (IMMP). This presentation was expanded to include: (1) a brief summary of the USFS's Best Management Practices Evaluation Program (BMPEP) final report written by Brian Staab, USFS Regional Hydrologist in Vallejo, and (2) a brief summary of a peer review meeting for the BMPEP recently held in Corvallis, Oregon. Pete participated in the peer review of the USFS BMPEP process and some of the ideas discussed at that meeting were incorporated in a concept paper on the IMMP he wrote and handed out at this MSG meeting.

The USFS BMPEP 2004 report includes water quality monitoring data collected from 1992 through 2002. The program fulfills monitoring commitments to the SWRCB and facilitates adaptive management. It employs 29 different onsite monitoring protocols to evaluate BMP implementation and effectiveness. Results show that while some improvements are necessary, the program performed reasonably well in protecting water quality on National Forest lands in California. BMP implementation and effectiveness were relatively high for most activities and elevated effects on water quality were relatively infrequent, particularly in recent years. Effects classified as elevated were typically caused by lack of or inadequate BMP implementation, and most were related to engineering practices. Roads, and in particular stream crossings, were the most problematic. These results are very similar to those reported by the final Hillslope Monitoring Report (Cafferata and Munn 2002) presented to the BOF.

Dr. Lee MacDonald, CSU, headed up the peer review session in Corvallis. The USFS has decided to make the BMPEP a national program, not just a California monitoring program. Lee is under contract to provide peer review on the BMPEP prior to taking it nationwide. We discussed using randomly selected monitoring sites vs. high risk sites, co-locating evaluations of similar types of BMPs, conducting implementation evaluations after a project is completed and rating effectiveness after stressing storm events, using a pilot program, developing a QA/QC program that includes several key components, and relating onsite monitoring to project-level administrative reviews/in-channel evaluations/research watersheds.

Following these portions of the talk, Pete summarized the current status of the IMMP. The basic concept is to form three dedicated teams made up of CDF, DFG, Water Board, and CGS staff located in Redding, Santa Rosa, and Fresno to monitor implementation and effectiveness of additional mitigation measures/special plan requirements. We anticipate that the team would evaluate items such as 1600 crossing compliance, WDR items—including Erosion Control Plan specifications, geologic recommendations, and mitigations required for listed aquatic species. The concept paper suggests that a non-random sample of high risk plans would be evaluated (15/yr Coast, 10/yr Northern, 5/yr Southern District). A nine step monitoring process is outlined in the concept paper and these steps were summarized.

General discussion on the IMMP followed. There was considerable concern expressed about the need for keeping a random sample of plans, at least initially to determine what the key site characteristics are for high risk plans. **Pete concluded his presentation by saying that, following recent meetings with other Review Team agencies, there appears to be support for the IMMP from their upper management. We still need feedback from the other Review Team agencies on specific monitoring approaches to use. The MSG IMMP subcommittee that met in March 2005 will be used to develop draft field forms and begin field testing. Mr. Gentry instructed Mr. Cafferata to set up an IMMP subcommittee meeting prior to the end of October. Members of the subcommittee present offered to continue to work on the project.**

Reports on Ongoing Projects

Brief updates on the three instream cooperative watershed monitoring projects were provided. Kevin Faucher, CTM, reported that the lower Wages Creek station has now been installed. CTM expects to have a report on data collected over the first two years of the project from Graham Matthews and Associates (GMA) in the next month. Dr. Lee Benda's sediment budget report should also be available in approximately the same time frame. Cajun James reported that she is installing 3 or 4 fiberglass Montana flumes at her Judd Creek stations in Tehama County in October. Pete Cafferata reported that Teri Jo Barber, working for the Mendocino County RCD on the Garcia Cooperative Instream Monitoring Project, now has a contract in place from CDF to pay for analyzing the water samples collected last winter for suspended sediment concentration.

Clay Brandow reported that he is hopeful that a draft Modified Completion Report (MCR) final report can be completed by the end of October, with a finalized report to be finished by the end of the year. An outline for the report was handed out and Clay stated that it is generally similar to that used for the Hillslope Monitoring Report written in 2002, except that the methods sections for roads, crossings, and WLPZs will be in the main portion of report. He provided a very brief summary of results for roads, crossings, and WLPZs. **He is also working with Chris Browder of CDF to produce an updated report on THP water quality rule violations from plans open from 2001 through 2004 so that it can be compared to the query developed for THPs open from 1998 through 2000.**

Next MSG Meeting Date

The next MSG meeting date was set for November 29th in the Willits area, but a meeting location has yet to be selected. When this information is available, it will be emailed to the group along with the meeting agenda.